



Molluscan Shellfish

Fact Sheet

With an increase of funding we can increase the number of oyster water samples taken and potentially open more oyster harvesting areas, which will increase the amount of product to be sold locally or through interstate commerce. The number of surveys would increase and have surveys done more frequently. An increase in funding will enable the program to promote health through education (i.e. brochures, harvesters, industry, etc.) for the oyster industry.

A decrease of funding would drastically decrease the number of oyster water samples taken and could potentially result in closure of oyster harvesting areas. This would affect the oyster industry by reducing the amount of product sold locally or through interstate commerce. Ultimately, this would result in detrimental economic impact. Overall a decrease in funding would hamper the overall productivity of the Molluscan Shellfish Program.

Objective

Prevent infectious diseases by providing health certification that shellfish-growing waters do not contain contamination of pollution hazardous to public health. All products must adhere to quality standards set forth in the Louisiana Sanitary Code and the National Shellfish Sanitation Program (NSSP).

Performance Indicators

- Number of Louisiana shellfish growing

Narrative

The following activities are Federally mandated by the National Shellfish Sanitation Program (NSSP) which is the federal/state cooperative program recognized by the United States Food and Drug Administration (USFDA) and the Interstate Shellfish Sanitation Conference (ISSC) for the sanitary control of shellfish produced and sold for human consumption in interstate

commerce. The Molluscan Shellfish Program conducts camp surveys yearly, shoreline surveys to determine pollution point sources, and marina surveys to determine possible contamination and pollution point sources. Sampling of oyster growing area water samples are done monthly, oyster meat samples, Bio-toxin *Pytoplankton* algae bloom sampling is done weekly, collection of data analysis, and conduct oyster meat sampling for transplant to ensure product is not contaminated or polluted and is safe for human consumption. Molluscan Shellfish Program determines, establishes and enforces closures/openings of oyster growing areas when dictated by adverse weather events, man-made disasters or data analysis. The program conducts data analysis to determine optimal time of reclassification, on a quarterly basis geographical Information Systems/historical data map classifications, and meteorological and geographical evaluations are done to determine currents, tides, rainfall and wind. The program provides enforcement of prohibited zones near and around contamination and pollution point sources/oil platforms, marinas, etc. In the Louisiana State Sanitary Code, Title 51 part 9 requires a registered sanitarian to conduct the following list of activities: conducts oyster harvesting vessel inspections, create map images and produce contingency plan for *Vibrio vulnificus* and *Vibrio parahaemolyticus*.

Better Health

Raw or undercooked shellfish, particularly oysters, may contain *Vibrio* bacteria, which naturally occur in marine waters. Shellfish from the Gulf of Mexico are especially vulnerable to these bacteria in warmer weather, from April through November. *V. vulnificus* (Vv) bacteria are not a result of pollution. Oysters feed by filtering water-surrounding areas where *Vibrios* may thrive and as a result, concentrate Vv in their tissues. When immune-compromised consumers eat these shellfish raw or undercooked, the bacteria enter their digestive tract and multiply rapidly. Vv bacteria may cause severe, life-threatening illness in people with compromised immune systems who eat raw shellfish. To minimize the risk of illness from the consumption of molluscan shellfish containing these pathogens, the Molluscan Shellfish Program places certain controls on the harvest of oysters. Naturally occurring pathogens may be present in relatively low numbers at the time that oysters are harvested, but may increase to more hazardous levels if they are exposed to time/temperature abuse. In most cases, control for Vv involves limits on the time from harvest to refrigeration. The length of time is dependent upon the average monthly maximum water temperature at the time of harvest, which is determined by sampling data.

The oyster industry depends upon safe oysters. Oysters are an influential part of seafood within interstate commerce and a good source of revenue for communities in Louisiana. Jobs are designed for many citizens whether they are related to harvesting or final processing for sale to

the consumer. One of the main concerns within the oyster industry is the wellbeing of individuals consuming raw oysters. Many illnesses and fatalities have been reported due to *Vibrio vulnificus*, *Vibrio parahaemolyticus* and Noroviruses.

This program serves the 4 million residents of Louisiana, the 20 million tourists that visit the state on annual basis, and the product is shipped throughout the nation. The commercial seafood program works collaboratively with NSSP, ISSC, USDA, Louisiana Department of Wildlife and Fisheries, Louisiana Oyster Task Force, Louisiana Seafood Promotion Board, and Louisiana State University.

In 2008, there were 3 closures due to natural and manmade adverse conditions in the Gulf of Mexico. An oil spill from a barge collision in the Mississippi river caused the closure of three areas in east and west of the Mississippi River. The increase hurricane activity in the oyster harvesting areas required precautionary closures of oyster harvesting for the entire coast. Due to immediate closure there were no oysters recalled and no illnesses reported.

On an average yearly basis Louisiana produces approximately 12 million pounds of oyster meat, with an economic impact to Louisiana of \$40 million per year. Approximately 70% of the harvested oysters are shipped through interstate commerce and leaving 30% to be sold in the local market. In 2006, 3565 full time jobs related to oyster harvesting were provided.

Approximately 38 % of the nation's oysters are harvested from Louisiana waters. Harvested oysters produced \$22,587,117 State and Local tax revenues were generated in 2006.

Reference links: www.issc.org, www.fda.gov, www.louisianaoysters.org, www.wlf.louisiana.gov